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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/902,109	07/11/2001	Kunihito Miyake	2185-0555P	8186

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EXAMINER

MULCAHY, PETER D

ART UNIT	PAPER NUMBER
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1713

DATE MAILED: 07/03/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/902,109

Applicant(s)

MIYAKE ET AL.

Examiner

Peter D. Mulcahy

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 11 July 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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Claims 1-8 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention.

The utilization of the word "type" renders the claim indefinite. It is unclear as to exactly how close to a polybutadiene polymer a compound needs to be so as to fall within the scope of the claims.

The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Chuchin et al., U.S. Patent 4,104,244 or Avakian et al., U.S. Patent 6,214,915.

Each of these patents shows compounds which fall within the scope of applicants' instantly claimed compound identified as being Formula 1. See specifically Chuchin at column 1 lines 60-65 as well as in the Examples, specifically Example 6. This compound is shown as being a stabilizer for many various

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polymeric resins. These compounds are shown to be effective in the protection of these polymers from thermal oxidative degradation. The only difference between this patent and the instantly claimed invention is the fact that polybutadiene is not specifically identified as being one of the polymers which is to be protected from the thermal oxidative degradation. The Examiner maintains that one of ordinary skill in the art would be motivated to utilize the compound as a stabilizer in a polybutadiene composition so as to achieve thermal oxidative stability given that these compounds are shown as stabilizers and the resins listed therein are not seen to be limiting and exclusive of polybutadiene. This is to say that the disclosure of the patent is seen to suggest to one of ordinary skill in the art that the stabilizers could be used in a wide variety of resins and one of ordinary skill in the art would have a reasonable expectation of success when adding these stabilizers to other resins and specifically a polybutadiene resin as broadly recited within the claims.

The Avakian et al. patent also shows compounds which fall within the scope of applicants' instantly claimed formula. See specifically column 5 lines 55-60. This patent is much broader as to the resins which the formulas can be incorporated in and columns 9 and 10 extensively list many different resins to which the compounds can be added. Polybutadiene resins are repeatedly

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identified within this listing and it would be prima facie obvious for one of ordinary skill in the art to select this resin from the list and obtain applicants' instantly claimed invention.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) The invention was described in (1) an application for patent, published under Section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 6-8 are rejected under 35 U.S.C. § 102(b) as being clearly anticipated by Chuchin et al.

Example 6 of this reference shows a stabilizer compound wherein the X and Y substituents as claimed are the alkylene group having one carbon atom. As such, these claims are seen to be clearly anticipated by this reference. Applicants should note that the language "for a polybutadiene type polymer" is not seen

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to be further limiting. This is a mental step and as such does not limit the claim.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter D. Mulcahy, whose telephone number is (703) 308-2449. The examiner can normally be reached on Tuesday through Friday from 7:30 A.M. to 6:00 P.M.

The fax telephone number for this group is (703) 305-3599.

Any inquiry of general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-2351.

P. Mulcahy:cdc  
June 27, 2003

  
**PETER D. MULCAHY**  
**PRIMARY EXAMINER**